

A3 The quorumless cluster can also include a common storage for a cluster definition. Each node may provide a proposed change to the cluster definition, however only a single coordinator node may update the cluster definition and apply the suggested changes.

Amendments to the specification are indicated in the attached "Marked Up Version of Amendments" (pages i - ii).

In the Claims

Please amend Claims 1-5. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages ii - iii).

- A4
1. (Amended) A method for managing membership of nodes in a computer network cluster, the method comprising:
 - defining a shareable storage device to store data for a network; and
 - granting membership in a network cluster to a node if the node has access to the shareable storage device.
 2. (Amended) The method of Claim 1 further comprising:
 - revoking membership of the node in the network cluster if the node ceases to have access to the shareable storage device.
 3. (Amended) The method of Claim 2 further comprising:
 - ceasing operation of the network cluster if no node has access to the shareable storage device.
 4. (Amended) A system for managing membership of nodes in a computer network cluster, comprising:
 - a network infrastructure for supporting a plurality of nodes in a network cluster;
 - a storage device separated from the network infrastructure and interconnectable to a plurality of nodes;
 - a node interconnected with the storage device; and

a manager mechanism to grant membership in the network cluster to the node based on the node having access to the storage device.

5. (Amended) A computer program product for managing membership of nodes in a computer network cluster, the computer program product comprising a computer usable medium having computer readable code thereon, including program code that:
- defines a shareable storage device to store data for a network cluster; and
 - grants membership in the network cluster to a node if the node has access to the shareable storage device.

Please add new Claims 6-21 to read as follows.

6. (New) The method of Claim 1 wherein granting membership comprises, from the node, accessing a message location in the shareable storage device.
7. (New) The method of Claim 6 wherein the message location identifies the cluster by identifying at least one physical storage device from the shareable storage device that is shared by the cluster member nodes.
8. (New) The method of Claim 7 wherein granting membership comprises accessing each identified physical storage device.
9. (New) The system of Claim 4 wherein the manager mechanism:
- revokes membership of the node in the network cluster if the node ceases to have access to the shareable storage device.
10. (New) The system of Claim 9 wherein the manager mechanism:
- ceases operation of the network cluster if no node has access to the shareable storage device.

11. (New) The system of Claim 4 wherein the manager mechanism includes a message location in the shareable storage device accessed by the node being granted membership in the network cluster.

12. (New) The system of Claim 11 wherein the message location identifies the cluster by identifying at least one physical storage device from the shareable storage device that is shared by the cluster member nodes.

13. (New) The system of Claim 12 wherein each identified physical storage device is accessible by the node being granted membership in the network cluster.

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14. (New) The computer program produce of Claim 5 further comprising program code that: revokes membership of the node in the network cluster if the node ceases to have access to the shareable storage device.

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15. (New) The computer program product of Claim 14 further comprises program code that: ceases operation of the network cluster if no node has access to the shareable storage device.

16. (New) The computer program product of Claim 5 wherein granting membership comprises, from the node, accessing a message location in the shareable storage device.

17. (New) The computer program product of Claim 16 wherein the message location identifies the cluster by identifying at least one physical storage device from the shareable storage device that is shared by the cluster member nodes.

18. (New) The computer program product of Claim 17 wherein granting membership comprises accessing each identified physical storage device.

19. (New) A method for managing membership of nodes in a computer network cluster, the method comprising:
- defining a shareable storage device to store data for a network;
 - creating a message location on the shareable storage device; and
 - granting membership in a network cluster to a node if the node has access to the shareable storage device, using the message location.
20. (New) A system for managing membership of nodes in a computer network cluster, comprising:
- a network infrastructure for supporting a plurality of nodes in a network cluster;
 - a storage device separated from the network infrastructure and interconnectable to a plurality of nodes;
 - a message location on the shareable storage device;
 - a node interconnected with the storage device; and
 - a manager mechanism to grant membership in the network cluster to the node based on the node having access to the storage device, using the message location.
21. (New) A computer program product for managing membership of nodes in a computer network cluster, the computer program product comprising a computer usable medium having computer readable code thereon, including program code that:
- defines a shareable storage device to store data for a network cluster;
 - creates a message location on the shareable storage device; and
 - uses the message location to grant membership in the network cluster to a node if the node has access to the shareable storage device.

REMARKS

Claims 1-5 are pending in the application, of which Claims 1, 4, and 5 are independent claims. All claims stand rejected under 35 U.S.C. § 102(e) based on U.S. Patent No. 6,151,688 to Wipfel et al. The Applicants respectfully disagree with the Office Action and traverse the rejections.